CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- Before this Amendment: Claims 1-21.
- After this Amendment: Claims 1-21

Non-Elected, Canceled, or Withdrawn claims: None

Amended claims: 10-18

New claims: None

Claims:

1. (Previously Presented) A method of synchronizing user interfaces on a plurality of peer machines within a peer-to-peer network comprising:

binding a display object on a first of the plurality of machines to a data source object on the first machine, the display object corresponding to a user interface element, the data source object comprising data usable by the display object for constructing the user interface element;

notifying the display object by the data source object that a change in the data source object has occurred, the change in the data source object being in accordance with a change in the user interface of a second of the plurality of peer machines within the peer-to-peer network;

retrieving information representative of the changed data source object by the display object from the data source object; and

conforming the user interface element to reflect the changed data source object.

2. **(Original)** The method according to claim 1, further comprising:

receiving over the network from the second of the plurality of machines a record having therein data, wherein the data is representative of a user interface element displayed on the second machine; and

creating the change in the data source object by extracting the data from the received record.

3. **(Original)** The method according to claim 2, wherein extracting the data from the received record comprises employing a model of object persistence to create an object from the data of the received record.

4. **(Original)** The method according to claim 1, wherein binding the display object on the first machine to the data source object comprises subscribing by the display object to notification of a change in one or more properties of the data source object.

5. **(Original)** The method according to claim 4, further comprising providing a notification interface by the display object to receive notification of a change in one or more properties of the data source object, and wherein notifying the display object from the data source object that a change in the data source object has occurred comprises calling of the notification interface by the data source object.

6. **(Original)** The method according to claim 1, wherein users of the plurality of machines are engaged in a group interaction session over the network, wherein each machine manifests a media item to the respective user.

7. **(Original)** The method according to claim 6, wherein the change to the data source object represents a change with respect to the media item.

8. **(Original)** An apparatus for creating a replicated user interface on each of a plurality of networked computers comprising:

a display on each of the plurality of networked computers;

a display object for causing a user interface element to be displayed on each of the plurality of networked computers;

on each of the plurality of networked computers a data source object bound to the display object, wherein any change to the data source object is reflected in the display object via the binding; and

a peer graph object on each of the plurality of networked computers for receiving data from any one of the others of the plurality of networked computers, and forwarding such data to the data source object.

9. **(Original)** The apparatus according to claim 8, wherein the display object is further operable for implementing a local change to the data source object pursuant to a change in the user interface of the respective computer, and wherein the peer graph object is further operable to retrieve data corresponding to the local change and forward the data corresponding to the local change to all others of the plurality of networked computers.

10. **(Currently Amended)** A computer-readable storage medium having embodied thereon computer-executable instructions that, when executed by a processor perform a method of synchronizing user interfaces on a plurality of peer machines within a peer-to-peer network comprising:

binding a display object on a first of the plurality of machines to a data source object on the first machine, the display object corresponding to a user interface element, the data source object comprising data usable by the display object for constructing the user interface element;

notifying the display object by the data source object that a change in the data source object has occurred, the change in the data source object being in accordance with a change in the user interface of a second of the plurality of peer machines within the peer-to-peer network, wherein the change in the data source object comprises an update to at least one of a plurality of fields in the data source object;

retrieving information representative of the changed data source object by the display object from the data source object; and

conforming the user interface element to reflect the changed data source object.

11. (Currently Amended) The computer-readable storage medium according to claim 10, further comprising instructions for:

receiving over the network from the second of the plurality of peer machines a record having therein data, wherein the data is representative of a user interface element displayed on the second machine; and

creating the change in the data source object by extracting the data from the received record.

12. (Currently Amended) The computer-readable storage medium according to claim 11, wherein extracting the data from the received record comprises employing a model of object persistence to create an object from the data of the received record.

13. (Currently Amended) The computer-readable storage medium according to claim 10, wherein binding the display object on the first machine to the data source object comprises subscribing by the display object to notification of a change in one or more properties of the data source object.

14. (Currently Amended) The computer-readable storage medium according to claim 13, further comprising instructions for providing a notification interface by the display object to receive notification of a change in one or more properties of the data source object, and wherein notifying the display object from the data source object that a change in the data source object has occurred comprises calling of the notification interface by the data source object.

15. (Currently Amended) The computer-readable storage medium according to claim 10, wherein users of the plurality of machines are engaged in a group interaction session over the network, wherein each machine manifests a media item to the respective user.

16. (Currently Amended) The computer-readable storage medium according to claim 15, wherein the change to the data source object represents a change with respect to the media item.

17. (Currently Amended) A replicated data store for storing one or more copies of an object residing on a first of a plurality of computers interconnected by a network onto one or more second computers of the plurality of computers comprising:

the first computer hosting a peer graph object ~~on the first computer~~ for distributing data representing the object to each of the second computers;

a peer graph object on each of the second computers for receiving the distributed data; and

a data source object on each of the second computers wherein the data source object creates a copy of the object from the data representing the object, wherein the copy of the object is data bound to the data source object.

18. (Currently Amended) An N to N replicated data store for maintaining a substantially identical copy of an object on each of N peer computers interconnected via a peer-to-peer network comprising:

a peer-to-peer networking module on each of the N interconnected computers for sending information to each of the others of the N interconnected computers, and for receiving information from any of the others of the N interconnected computers;

a data source on each of the N interconnected computers bound to the respective copy of the object on that computer, wherein any change, wherein such change comprises an update to at least one of a plurality of fields, in any copy of the object on any of the N interconnected computers is detected by the data source on that computer and is forwarded to the peer-to-peer networking module on that computer, so that notification of the change is forwarded to all others of the N interconnected computers.

19. (Original) The N to N replicated data store of claim 18, wherein the peer-to-peer networking module implements the peernet protocol.

20. (Previously Presented) A method of synchronizing a user interface element for display on each of a plurality of machines interconnected by a peer-to-peer network comprising:

binding a display object on a first of the plurality of machines to a data source object on the first machine, the display object corresponding to the user interface element;

notifying the data source object by the display object that a change in the display object has occurred;

retrieving information representative of the changed display object by the data source object from the display object; and

transmitting the information representative of the changed display object by the data source object to the others of the plurality of peer machines.

21. (Original) The method according to claim 20, wherein transmitting the information representative of the changed display object to the others of the plurality of peer machines comprises transferring the information from the data source object to a peer-to-peer connection module on the first of the plurality of peer machines, whereby the information is forwarded to a counterpart peer-to-peer connection module on each of the others of the plurality of peer machines.